

## **CLAIMS**

The following is a clean copy of Applicant's claims including updated status identifiers:

1. (CURRENTLY AMENDED) A method of providing vascular calcification therapy to an individual a human in need of treatment comprising the step of administering to the individual human during dialysis a dialysate having an effective amount of a pyrophosphate-type compound, wherein the human has renal disease or failure.
2. (ORIGINAL) The method of claim 1, wherein the pyrophosphate-type compound is an alkali metal pyrophosphate.
3. (ORIGINAL) The method of claim 1, wherein the pyrophosphate-type compound is chosen from tetraalkali metal pyrophosphate, dialkali metal diacid pyrophosphate, trialkali metal monoacid pyrophosphate, and mixtures thereof.
4. (ORIGINAL) The method of claim 1, wherein the pyrophosphate-type compound is chosen from tetrasodium pyrophosphate, tetrapotassium pyrophosphate, dicalcium pyrophosphate, phosphoric acid, sodium acid pyrophosphate, sodium dihydrogen pyrophosphate, and mixtures thereof.
5. (ORIGINAL) The method of claim 1, wherein the vascular calcification is caused by renal disease or failure.

6-8. (CANCELED)

9. (ORIGINAL) The method of claim 1, wherein the pyrophosphate-type compound has the following structural formula: wherein the X is chosen from at least one of a hydrogen and a cation.

10. (ORIGINAL) The method of claim 9, wherein each X is individually chosen to be at least one of: hydrogen, sodium, potassium, and calcium.

11. (CURRENTLY AMENDED) The method of claim 1, wherein the pyrophosphate-type compound is administered to the individual human in a dialysate fluid at a concentration of pyrophosphate-type compound of at least about 1  $\mu$ M.

12. (CURRENTLY AMENDED) The method of claim 1, wherein the pyrophosphate-type compound is administered to the individual human in a dialysate fluid at a concentration of pyrophosphate-type compound from about 1  $\mu$ M to about 10  $\mu$ M.

13. (CURRENTLY AMENDED) The method of claim 1, wherein the pyrophosphate-type compound is administered to the individual human in a dialysate at a concentration from about 3  $\mu$ M to about 5  $\mu$ M.

14. (CURRENTLY AMENDED) A method of prophylactically treating vascular calcification comprising administering to an individual a human in need of treatment during dialysis a dialysate having an effective amount of at least one pyrophosphate-type compound.

15. (ORIGINAL) The method of claim 14, wherein the pyrophosphate-type compound is an alkali metal pyrophosphate.

16. (ORIGINAL) The method of claim 14, wherein pyrophosphate-type compound is administered to the individual in a dialysate.

17-34. (CANCELED)